



**Application for Certification as an Eligible Energy Resource Under the
Delaware Renewable Energy Portfolio Standard**

1. Name of Facility

Cranmer Residence

2. Facility Address

4598 Kirkwood St. Georges
St Georges DE 19733

Is the facility located within the PJM control area?

☒ Yes

☐ No

If No, does the Facility have import capabilities¹?

☐ Yes

☐ No

3. Name of Owner

Mark Cranmer

Mailing Address

4598 Kirkwood St. Georges
St Georges DE 19733

Phone (302) 218-1303 Fax _____

Email mark.cranmer@pbfenergy.com

4. Name of Operator

Mailing Address

same as above!

Phone _____ Fax _____

Email _____

¹ Documentation will be required to substantiate import capabilities into PJM

5. Name of Contact Person

Mark Cranmer

Mailing Address

4598 Kirkwood St. Georges
St Georges DE 19733

Phone (302) 218-1303 Fax _____

Email mark.cranmer@pbtenergy.com

6. Name of REC/SREC Owner

Mailing Address

Same as above

Phone _____ Fax _____

Email _____

7. List all PJM-EIS GATS State Certification Numbers assigned to this facility:

None

8. Operational Characteristics:

Fuel Types Used (check all that apply):

☐ Gas combustion from the anaerobic digestion of organic material

☐ Geothermal

☐ Ocean, wave or tidal actions, currents, or thermal differences

☐ Qualified Biomassⁱ

☐ Qualified Fuel Cellsⁱⁱ

☐ Qualified Hydroelectricⁱⁱⁱ

☐ Qualified Methane Gas captured from a landfill gas recovery system^{iv}

☒ Solar

☐ Wind

If co-firing, provide the formula on file with PJM Environmental Information Services, Inc. (PJM-EIS) _____

Rated Capacity (in megawatts - DC) 01848

If multiple fuel types are utilized, attach the formula for computing the portion of output per fuel type by megawatts per hour generated.

Facility Final Approved Interconnection Date 4/21/17

If co-firing with fossil fuels, co-fire start date _____

If co-firing with fossil fuels, attach the allocation formula on file with PJM.

9. Is the Applicant's facility customer-sited generation^v?

☒ Yes ☐ No

Is the Applicant's facility a community owned generating facility^{vi}?

☐ Yes ☒ No

Can the output from the customer-sited generation be appropriately metered?

☒ Yes ☐ No

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?

☐ Yes*

☒ No

Advanced Solar Heating + Cooling

Company Name of Installer

of MD

William H. Tidaback
Signature of Company Representative

307 N. Bridge St #216

Address

Elkton MD 21921

Address

William H. Tidaback
Print Name of Company Representative

*If Yes, please attach the following documentation:

- A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified
 - If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied
 - If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used

11. If the Applicant's installation is solar or wind sited in Delaware:

a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

☐ Yes*

☒ No

b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?

☐ Yes*

☒ No

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Elkton MD 21921

Address

William H. Tidaback
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*If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.

I, William H Tidaback (print name) hereby certify under penalty of perjury that

1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
3. I /my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: William H Tidaback
Date: 5/18/17

Required Documentation:

- ✓ ☒ If the facility is customer-sited generation, attach a copy of the utility's Final Approved Interconnection Agreement
- ☐ One copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is >1.0 MW

ⁱ "Qualified Biomass" means electricity generated from the combustion of biomass that has been cultivated in a sustainable manner as determined by Delaware Department of Natural Resources and Environmental Control (DNREC), and is not combusted to produce energy in a waste to energy facility or in an incinerator.

ⁱⁱ "Qualified Fuel Cells" means electricity generated by a fuel cell powered by Renewable Fuels, as that term is defined in Section 1.0 of the Rules and Procedures to Implement the Renewable Energy Portfolio Standard, Delaware Public Service Commission Regulation Docket No. 56.

ⁱⁱⁱ "Qualified Hydroelectric" means electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC.

^{iv} "Qualified Methane Gas" means electricity generated by the combustion of methane gas captured from a landfill gas recovery system; provided, however, that:

1. Increased production of landfill gas from production facilities in operation prior to January 1, 2004 demonstrates a net reduction in total air emissions compared to flaring and leakage;
2. Increased utilization of landfill gas at electric generating facilities in operation prior to January 1, 2004 (i) is used to offset the consumption of coal, oil, or natural gas at those facilities, (ii) does not result in a reduction in the percentage of landfill gas in the facility's average annual fuel mix when calculated using fuel mix measurements for 12 out of any continuous 15 month period during which the electricity is generated, and (iii) causes no net increase in air emissions from the facility; and
3. Facilities installed on or after January 1, 2004 meet or exceed 2004 Federal and State air emission standards, or the Federal and State air emission standards in place on the day the facilities are first put into operation, whichever is higher.

^v "Customer-sited Generation" means a generating unit that is interconnected on the end use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

^{vi} "Community-owned Energy Generating Facility" means a renewable energy generating facility that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone facility or behind the meter of a participating owner or customer. The facility shall be interconnected to the distribution system and operated in parallel with an electric distribution company's transmission and distribution facilities.

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

- a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents? *No*

If you answered yes to "a." above, complete the following as evidence.

The following individuals (list every employee) were employed by

Installation Company Name

as direct labor (physical construction and installation) for this facility: (Attach additional sheets if necessary)

Please complete the following information for all individuals listed above:

Name	Home Address City, State only (As per Tax Withholding)	Social Security Number (Last 2 digits only)

Total Delaware Resident Employees: _____ Total Number of Employees: _____

% of Delaware Residents (Delaware Residents Divided by Total Employees): _____

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

- b. Does the installing company employ, in total, a minimum of 75% of workers who are Delaware residents? *No*

If you answered yes to "b." above, complete the following as evidence:

Installation Company Name _____

employed the following individuals (list EVERY employee on the payroll during the period from project start date until project completion date). Projects are considered complete upon final interconnection approval to operate. (Attach additional sheets if necessary)

Project Start Date: _____ Project Complete Date: _____

Employee Full Name	Home Address City, State Only (As per Tax Withholding)	Social Security Number (Last 2 digits Only)

Total Delaware Resident Employees: _____ Total Number of Employees: _____

% of Delaware Residents (Delaware Residents Divided by Total Employees): _____



A P&G Company

PART 2

DELAWARE LEVEL 2, 3, & 4 INTERCONNECTION APPLICATION & AGREEMENT

With Terms and Conditions for Interconnection
(Review of Small Generator Facilities Less than or Equal to 10 MW¹⁵)

(Final Agreement – must be completed after installation and prior to interconnection)

Certificate of Completion¹⁶

INTERCONNECTION CUSTOMER CONTACT INFORMATION

Customer Name: Mark Cranmer
Mailing Address: 4598 Kirkwood St Georges
City: St Georges State: DE Zip Code: 19733
Telephone (Daytime): (302) 218-1303 (Evening): _____
Fax Number: _____ E-Mail Address: mark.cranmer@pbenergy.com

FACILITY INFORMATION

Facility Address: 4598 Kirkwood St Georges
City: ST. GEORGES State: DE Zip Code: 19733
DPL Account #: 55000551634 Meter #: TCA107111180 (Required by DPL)
Energy Source: Solar PV Prime Mover: Photovoltaics
Inverter Type: ☒ Forced Commutated ☐ Line Commutated ☐ Number of Inverters: 2
Inverter Manufacturer: Solaredge Model Number(s) of Inverter: SE10000A-US SE7600A-US

Rating
DC Generator Total¹⁷ Nameplate Rating: 18.48 (kW),
AC Inverter Total¹⁸ Rating 17.6 (kW),
AC System Design Total Capacity¹⁹: 17.6 (kW) _____ (kVA)

Generator (or PV Panel) Manufacturer, Model #: Hyundai S280RG

¹⁵ Up to 2 MW for Net Energy Metering.

¹⁶ Information entered here on Certificate of Completion (Part 2) must match part 1

¹⁷ Sum of all generators or PV Panels

¹⁸ Sum of all inverters

¹⁹ This will be your system design capacity based upon your unique system variables.

EQUIPMENT INSTALLATION CONTRACTOROwner (Customer) Installed: ☐ Yes ☒ NoName: Advanced Solar Heating and Cooling of MDMailing Address: 307 N Bridge STCity: ElktonState: MDZip Code: 21921Contact Person: Bill TidabackTelephone (Daytime): (302) 731-1000

(Evening): _____

Fax Number: _____

E-Mail Address: butchtidaback@gmail.com**FINAL ELECTRIC INSPECTION AND INTERCONNECTION CUSTOMER SIGNATURE**

The Small Generator Facility is complete and has been approved by the local electric inspector having jurisdiction. A signed copy of the electric inspector's form indicating final approval is attached. The Interconnection Customer acknowledges that it shall not operate the Small Generator Facility until receipt of the final acceptance and approval by the EDC as provided below.

Signed: _____

(Signature of interconnection customer)

Date 3/28/17Printed Name: MARK D. CRANMERCheck if copy of signed electric inspection form is attached (required) ☒Check if copy of as built documents is attached (projects larger than 10 kW only) ☐**ACCEPTANCE AND FINAL APPROVAL FOR INTERCONNECTION (for EDC use only)**

The interconnection agreement is approved and the Small Generator Facility is approved for interconnected operation upon the signing and return of this Certificate of Completion by EDC:

Electric Distribution Company waives Witness Test? (Initial) Yes (LH) No (_____)

If not waived, date of successful Witness Test: _____ Passed: (Initial) (_____)

EDC Signature: Lakeisha Harris 2017.04.21 12:58:34 -04'00'Date: 04/21/2017Printed Name: Lakeisha HarrisTitle: Acct Rep